Parallel Computing 17 (1991) 1439–1443
North-Holland

Author index of volume 17 (1991)

Akl, S.G., *see* **Osiakwan, C.N.K.** (6) 643– 656
Alef, M., Concepts for efficient multigrid implementation on SUPRENUM-like architectures (1) 1– 16
Allison, D.C.S., *see* **Chakraborty, A.** (12) 1385–1395
Arvindam, S., V. Kumar, V.N. Rao and **V. Singh**, Automatic test pattern generation on parallel processors (12) 1323–1342
Averbuch, A., *see* **Gohberg, I.** (4) 563– 577

Bader, G. and **E. Gehrke**, On the performance of transputer networks for solving linear systems of equations (12) 1397–1407
Bampis, E., J.C. Konig and **D. Trystram**, Impact of communications on the complexity of the Parallel Gaussian Elimination (1) 55– 61
Bane, M.K., *see* **Freeman, T.L.** (6) 673– 681
Bar-On, I., Efficient logarithmic time parallel algorithms for the Cholesky decomposition and Gram–Schmidt process (4) 409– 417
Berry, M., G. Cybenko and **J. Larson**, Scientific benchmark characterizations (10) 1173–1194
Bertsekas, D.P. and **D.A. Castañon**, Parallel synchronous and asynchronous implementations of the auction algorithm (6) 707– 732
Bondeli, S., Divide and conquer: a parallel algorithm for the solution of a tridiagonal linear system of equations (4) 419– 434
Born, J., *see* **Mühlenbein, H.** (6) 619– 632
Briggs, W.L., *see* **Swarztrauber, P.N.** (6) 607– 617
Briggs, W.L., *see* **Sweet, R.A.** (2) 121– 131
Brugnano, L., A parallel solver for tridiagonal linear systems for distributed memory parallel computers (9) 1017–1023

Callahan, D., *see* **Levine, D.** (10) 1223–1244
Casaleggio, A., *see* **Corana, A.** (6) 809– 820
Castañon, D.A., *see* **Bertsekas, D.P.** (6) 707– 732
Chajakis, E.D. and **S.A. Zenios**, Synchronous and asynchronous implementations of relaxation algorithms for nonlinear network optimization (8) 873– 894
Chakraborty, A., D.C.S. Allison, C.J. Ribbens and **L.T. Watson**, Note on unit tangent vector computation for homotopy curve tracking on a hypercube (12) 1385–1395
Chen, G.-H. and **M.-S. Chern**, Synthesis of algorithms on processor arrays (2) 279– 284
Chen, W.-T. and **M.-Y. Fang**, An efficient procedure for theorem proving in propositional logic on vector computers (9) 983– 995
Chern, M.-S., *see* **Chen, G.-H.** (2) 279–284
Chikohora, S., *see* **Evans, D.J.** (6) 833– 843
Choi, Y.-H., Reconfigurable VLSI/WSI multipipelines (8) 941– 952
Chronopoulos, A.T., *see* **Kim, S.K.** (6) 763– 778
Clint, M., *see* **Waring, L.C.** (9) 1043–1050
Corana, A., A. Casaleggio, C. Rolando and **S. Ridella**, Efficient computation of the correlation dimension from a time series on a LIW computer (6) 809– 820
Cybenko, G., *see* **Berry, M.** (10) 1173–1194

Das, S.K. and **C.-Q. Yang**, Performance of parallel spanning tree algorithms on linear arrays of transputers and Unix systems (4) 527– 551
De Gloria, A. and **P. Faraboschi**, A Boltzmann Machine approach to code optimization (9) 969– 982
Deren, W., *see* **Evans, D.J.** (2) 165– 180
Detert, U. and **G. Hofemann**, CRAY X-MP and Y-MP memory performance (4) 579– 590
Dixit, K.M., The SPEC benchmarks (10) 1195–1209
Dongarra, J., M. Furtney, S. Reinhardt and **J. Russell**, Parallel Loops – A test suite for parallelizing compilers: Description and example results (10) 1247–1255
Dongarra, J. and **W. Gentzsch**, Benchmarking of high performance computers (10) 1067–1069

0167-8191/91/$03.50 © 1991 – Elsevier Science Publishers B.V. All rights reserved

Dongarra, J., *see* **Levine, D.** (10) 1223–1244
Dunigan, T.H., Performance of the Intel iPSC/860 and Ncube 6400 hypercubes (10) 1285–1302
Dzwinel, W., The search for an optimal multiprocessor interconnection network (1) 95– 100

Erhel, J., A. Traynard and **M. Vidrascu**, An element-by-element preconditioned conjugate gradient method implemented on a vector computer (9) 1051–1065
Escaig, Y. and **W. Oed**, Analysis tools for Micro- and Autotasking programs on CRAY multiprocessor systems (Short communication) (12) 1425–1433
Evans, D.J., The parallel AGE method for the elliptic problem in two dimensions (8) 925– 940
Evans, D.J. and **S. Chikohora**, The Alternating Group Explicit (AGE) method on a transputer network (6) 833– 843
Evans, D.J. and **W. Deren**, An asynchronous parallel algorithm for solving a class of nonlinear simultaneous equations (2) 165– 180
Evans, D.J. and **M.D. Levin**, A matrix-squaring variant of the power method on the DAP (1) 49– 54
Evans, D.J., *see* **Levin, M.D.** (4) 591– 602
Evans, D.J., *see* **Wheat, M.** (1) 101– 107
Evans, D.J., *see* **Wheat, M.** (9) 1035–1041

Fang, M.-Y., *see* **Chen, W.-T.** (9) 983– 995
Faraboschi, P., *see* **De Gloria, A.** (9) 969– 982
Feitelson, D.G., Deadlock detection without wait-for graphs (12) 1377–1383
Feng, W.-S., *see* **Shih, P.-H.** (2) 229– 239
Fischer, D., On superlinear speedups (6) 695– 697
Francomano, E., A. Pecorella and **A. Tortorici Macaluso**, Parallel experience on the inverse matrix computation (8) 907– 912
Freeman, T.L. and **M.K. Bane**, Asynchronous polynomial zero-finding algorithms (6) 673– 681
Frieder, O., *see* **Topkar, V.** (8) 845– 871
Furtney, M., *see* **Dongarra, J.** (10) 1247–1255

Gehrke, E., *see* **Bader, G.** (12) 1397–1407
Gentzsch, W., *see* **Dongarra, J.** (10) 1067–1069
Gladwell, I., *see* **Paprzyck, M.** (2) 133– 153
Gohberg, I., I. Koltracht, A. Averbuch and **B. Shoham**, Timing analysis of a parallel algorithm for Toeplitz matrices on a MIMD parallel machine (4) 563– 577
Grassl, C.M., Parallel performance of applications on supercomputers (10) 1257–1273
Guerrini, C., *see* **Montefusco, L.B.** (2) 253– 263
Gustafson, J.L., *see* **Sun, X.-H.** (10) 1093–1109

Häfner, H., *see* **Schönauer, W.** (10) 1131–1149
Hagemann, J., Combinatorial structures for multiprocessor-systems (6) 699– 706
Hake, J.-F. and **W. Homberg**, The impact of memory organization on the performance of matrix calculations (2) 311– 327
Hey, A.J.G., The Genesis distributed memory benchmarks (10) 1275–1283
Heydorn, S. and **P. Weidner**, Optimization and performance analysis of thinning algorithms on parallel computers (1) 17– 27
Hockney, R., Performance parameters and benchmarking of supercomputers (10) 1111–1130
Hodges, R.E., *see* **Wu, C.-H.** (6) 821– 832
Hofemann, G., *see* **Detert, U.** (4) 579– 590
Homberg, W., *see* **Hake, J.-F.** (2) 311– 327
Honjou, N., K. Ohtsuki, M. Sekiya and **F. Sasaki**, A parallelization technique for the speedup of configuration interaction computing (2) 297– 284
Horiguchi, S., Hybrid systolic sorters (9) 997–1007
Hoyle, B.S., *see* **Wiegand, F.** (6) 791– 807
Huang, Y. and **Y. Paker**, A parallel FFT algorithm for transputer networks (8) 895– 906
Hutchinson, D. and **B.M.S. Khalaf**, Parallel algorithms for solving initial value problems: front broadening and embedded parallelism (9) 957– 968

Jeong, C.-S., Parallel Voronoi diagram in L_1 (L_∞) metric on a mesh-connected computer (2) 241– 252
Jeong, C.-S., An improved parallel algorithm for constructing Voronoi diagram on a mesh-connected computer (4) 505– 514

Jeong, C.-S. and **M.-H. Kim**, Fast parallel simulated annealing for traveling salesman problem on SIMD machines with linear interconnections (2) 221– 228

Karoui-Sahtout, F., *see* **Mahjoub, Z.** (4) 471– 481
Khalaf, B.M.S., *see* **Hutchinson, D.** (9) 957– 968
Kiehl, M., A vector implementation of an ODE code for multi-point-boundary-value problems (2) 347– 352
Kim, M.-H., *see* **Jeong, C.-S.** (2) 221– 228
Kim, S.K. and **A.T. Chronopoulos**, A class of Lanczos-like algorithms implemented on parallel computers (6) 763– 778
Knecht, R. and **S. Knecht**, CONPAR 90 – VAPP IV (1) 113– 115
Knecht, S., *see* **Knecht, R.** (1) 113– 115
Köckler, N. and **M. Simon**, Parallel singular value decomposition with cyclic storing (1) 39– 47
Koltracht, I., *see* **Gohberg, I.** (4) 563– 577
Konig, J.C., *see* **Bampis, E.** (1) 55– 61
Krishnamurthy, E.V. and **H. Schröder**, Systolic algorithm for multivariable approximation using tensor products of basis functions (3) 483– 492
Krishnamurthy, E.V., *see* **Schröder, H.** (2) 273– 277
Krishnamurthy, E.V., *see* **Schroder, H.** (4) 493– 503
Kumar, V., *see* **Arvindam, S.** (12) 1323–1342

Larson, J., *see* **Berry, M.** (10) 1173–1194
Levin, M.D. and **D.J. Evans**, The inversion of matrices by the double-bordering algorithm on MIMD computers (4) 591– 602
Levin, M.D., *see* **Evans, D.J.** (1) 49– 54
Levine, D., D. Callahan and **J. Dongarra**, A comparative study of automatic vectorizing compilers (10) 1223–1244
Li, X., Nearest neighbor classification on two types of SIMD machines (4) 381– 407
Lin, Y.-C., An FP-based tool for the synthesis of regular array algorithms (4) 457– 470
Lin, Y.-C., Array size anomaly of problem-size independent systolic arrays for matrix-vector multiplication (4) 515– 522
Linn, M.A., *see* **Nagel, W.E.** (10) 1303–1321

Mahjoub, Z. and **F. Karoui-Sahtout**, Parallel algorithms for redundant precedence relations elimination in task systems (4) 471– 481
Manoharan, S. and **P. Thanisch**, Assigning dependency graphs onto processor networks (1) 63– 73
Manson, G.A., *see* **Rabhi, F.A.** (2) 189– 205
Moncrieff, D., V.R. Saunders and **S. Wilson**, Parallel processing using macro-tasking in a multi-job environment on a CRAY Y-MP computer (6) 733– 750
Montefusco, L.B. and **C. Guerrini**, A domain decomposition method for scattered data approximation on a distributed memory multiprocessor (2) 253– 263
Mühlenbein, H., M. Schomisch and **J. Born**, The parallel genetic algorithm as function optimizer (6) 619– 632
Müller, S.M. and **D. Scheerer**, A method to parallelize tridiagonal solvers (2) 181– 188
Müller-Wichards, D., Problem size scaling in the presence of parallel overhead (12) 1361–1376
Murthy, C.S.R., *see* **Selvakumar, S.** (9) 1009–1016
Murthy, V.K., *see* **Schroder, H.** (4) 493– 503

Nagel, W.E. and **M.A. Linn**, Benchmarking parallel programs in a multiprogramming environment: The PAR-Bench system (10) 1303–1321
Nelson, V.P., *see* **Wang, C.-J.** (1) 75– 84

Oed, W., *see* **Escaig, Y.** (12) 1425–1433
Ohtsuki, K., *see* **Honjou, N.** (2) 297– 284
Olariu, S. and **Z. Wen**, An efficient parallel algorithm for multiselection (6) 689– 693
Olariu, S., Z. Wen and **W. Zhang**, A faster optimal algorithm for the measure problem (6) 683– 687
Oliveira, S., *see* **Sweet, R.A.** (2) 121– 131
Orban, G.A., *see* **Tollenaere, T.** (4) 361– 379
Osiakwan, C.N.K. and **S.G. Akl**, Parallel computation of matchings in trees (6) 643– 656
Otto, J., *see* **Swarztrauber, P.N.** (6) 607– 617

Paker, Y., *see* **Huang, Y.** (8) 895– 906
Paprzyck, M. and **I. Gladwell**, Solving almost block diagonal systems on parallel computers (2) 133– 153

Park, H., A parallel algorithm for the unbalanced orthogonal Procrustes problem (8) 913– 923
Pecorella, A., *see* **Francomano, E.** (8) 907– 912
Peters, A., Sparse matrix vector multiplication techniques on the IBM 3090 VF (12) 1409–1424
Phillips, C., The performance of the BLAS and LAPACK on a shared memory scalar multiprocessor (7) 751– 761
Pini, G., A parallel algorithm for the partial eigensolution of sparse symmetric matrices on the CRAY Y-MP (1) 553– 561
Porsche, J.L., *see* **Sweet, R.A.** (2) 121– 131
Prasad, V.V.R. and **C. Siva Ram Murthy**, Downloading node programs/data into hypercubes (6) 633– 642

Rabhi, F.A. and **G.A. Manson**, Divide-and-Conquer and parallel graph reduction (2) 189– 205
Rao, V.N., *see* **Arvindam, S.** (12) 1323–1342
Reinhardt, S., *see* **Dongarra, J.** (10) 1247–1255
Ribbens, C.J., *see* **Chakraborty, A.** (12) 1385–1395
Ridella, S., *see* **Corana, A.** (6) 809– 820
Rolando, C., *see* **Corana, A.** (6) 809– 820
Russell, J., *see* **Dongarra, J.** (10) 1247–1255

Sasaki, F., *see* **Honjou, N.** (2) 297– 284
Saunders, V.R. and **S. Wilson**, "Scavenger" programming for the CRAY X-MP computer (9) 1025–1034
Saunders, V.R., *see* **Moncrieff, D.** (6) 733– 750
Scheerer, D., *see* **Müller, S.M.** (2) 181– 188
Schimmler, M., Parallel strong orientation on a mesh connected computer (6) 657– 664
Schomisch, M., *see* **Mühlenbein, H.** (6) 619 632
Schönauer, W. and **H. Häfner**, Performance estimates for supercomputers: The responsibilities of the manufacturer and of the user (10) 1131–1149
Schroder, H., V.K. Murthy and **E.V. Krishnamurthy**, Systolic algorithm for polynomial interpolation and related problems (4) 493– 503
Schröder, H. and **E.V. Krishnamurthy**, Systolic computation of characteristic polynomials of Hessenberg matrices (2) 273– 277
Schröder, H. and **P. Strazdins**, Program compression on the instruction systolic array (2) 207– 219
Schröder, H., *see* **Krishnamurthy, E.V.** (3) 483– 492
Schwandt, H., Memory access problems in block cyclic reduction on vector computers (2) 329– 346
Sekiya, M., *see* **Honjou, N.** (2) 297– 284
Selvakumar, S. and **C.S.R. Murthy**, An efficient algorithm for mapping VLSI circuit simulation programs onto multiprocessors (9) 1009–1016
Senechaud, P., A MIMD implementation of the Buchberger Algorithm for Boolean polynomials (1) 29– 37
Shih, P.-H. and **W.-S. Feng**, An application of neural networks on channel routing problem (2) 229– 239
Shoham, B., *see* **Gohberg, I.** (4) 563– 577
Simmen, M., Comments on broadcast algorithms for two-dimensional grids (1) 109– 112
Simon, M., *see* **Köckler, N.** (1) 39– 47
Singh, V., *see* **Arvindam, S.** (12) 1323–1342
Siva Ram Murthy, C., *see* **Prasad, V.V.R.** (6) 633– 642
Sloboda, F., A projection method of the Cimmino type for linear algebraic systems (4) 435– 442
Sood, A.K., *see* **Topkar, V.** (8) 845– 871
Sørevik, T., *see* **Storøy, S.** (4) 523– 525
Storøy, S. and **T. Sørevik**, A note on an orthogonal systolic design for the assignment problem (4) 523– 525
Strazdins, P., *see* **Schröder, H.** (2) 207– 219
Sun, X.-H. and **J.L. Gustafson**, Toward a better parallel performance metric (10) 1093–1109
Swarztrauber, P.N., R.A. Sweet, W.L. Briggs, Van Emden Henson and **J. Otto**, Bluestein's FFT for arbitrary N on the hypercube (6) 607– 617
Sweet, R.A., W.L. Briggs, S. Oliveira, J.L. Porsche and **T. Turnbull**, FFTs and three-dimensional Poisson solvers for hypercubes (2) 121– 131
Sweet, R.A., *see* **Swarztrauber, P.N.** (6) 607– 617

Taillard, E., Robust taboo search for the quadratic assignment problem (4) 443– 455
Tervola, P. and **W. Yeung**, Parallel Jacobi algorithm for matrix diagonalisation on transputer networks (2) 155– 163
Thanisch, P., *see* **Manoharan, S.** (1) 63– 73
Thuné, M., Straightforward partitioning of composite grids for explicit difference methods (6) 665– 672

Tien, J.-Y. and **W.-P. Yang**, Hierarchical spanning trees and distributing on incomplete hypercubes (12) 1343–1360
Tollenaere, T. and **G.A. Orban**, Simulating modular neural networks on message-passing multiprocessors (4) 361– 379
Topkar, V., O. Frieder and **A.K. Sood**, Duplicate removal on Hypercube engines: An experimental analysis (8) 845– 871
Torralba, A., A systolic array with applications to image processing and wire-routing in VLSI circuits (1) 85– 93
Tortorici Macaluso, A., *see* **Francomano, E.** (8) 907– 912
Traynard, A., *see* **Erhel, J.** (9) 1051–1065
Trystram, D., *see* **Bampis, E.** (1) 55– 61
Turnbull, T., *see* **Sweet, R.A.** (2) 121– 131

van der Pas, R.J. and **J.M. van Kats**, Parallelism in a multi-user environment (2) 285– 296
van der Steen, A.J., The benchmark of the EuroBen group (10) 1211–1221
Van Emden Henson, , *see* **Swarztrauber, P.N.** (6) 607– 617
van Kats, J.M., *see* **van der Pas, R.J.** (2) 285– 296
Vidrascu, M., *see* **Erhel, J.** (9) 1051–1065

Wang, C.-J. and **V.P. Nelson**, Petri net performance modeling of a modified mesh-connected parallel computer (1) 75– 84
Wang, C.-J., *see* **Wu, C.-H.** (6) 821– 832
Waring, L.C. and **M. Clint**, Parallel Gram–Schmidt orthogonalisation on a network of transputers (9) 1043–1050
Watson, L.T., *see* **Chakraborty, A.** (12) 1385–1395
Weicker, R.P., A detailed look at some popular benchmarks (10) 1153–1172
Weidner, P., *see* **Heydorn, S.** (1) 17– 27
Wen, Z., *see* **Olariu, S.** (6) 683– 687
Wen, Z., *see* **Olariu, S.** (6) 689– 693
Wheat, M. and **D.J. Evans**, Maintenance of shared data structures on tightly coupled multiprocessors (1) 101– 107
Wheat, M. and **D.J. Evans**, Asynchronous parallel merging (9) 1035–1041
Wiegand, F. and **B.S. Hoyle**, Development and implementation of real-time ultrasound process tomography using a transputer network (6) 791– 807
Wilson, S., *see* **Moncrieff, D.** (6) 733– 750
Wilson, S., *see* **Saunders, V.R.** (9) 1025–1034
Worlton, J., Toward a taxonomy of performance metrics (10) 1073–1092
Wright, K., Parallel algorithms for *QR* decomposition on a shared memory multiprocessor (6) 779– 790
Wu, C.-H., R.E. Hodges and **C.-J. Wang**, Parallelizing the Self-Organizing Feature Map on multiprocessor systems (6) 821– 832

Yang, C.-Q., *see* **Das, S.K.** (4) 527– 551
Yang, W.-P., *see* **Tien, J.-Y.** (12) 1343–1360
Yeung, W., *see* **Tervola, P.** (2) 155– 163

Zenios, S.A., *see* **Chajakis, E.D.** (8) 873– 894
Zhang, H., On the accuracy of the parallel diagonal dominant algorithm (2) 265– 272
Zhang, W., *see* **Olariu, S.** (6) 683– 687